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NRL | NRB 80007-2352

Serial No. : 10/060226
Applicant : ARAKAWA, TOMOFUMI
Filing Date : 02/01/2002
Date Mailed : 05/02/2003

June 1, 2003

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Notice of Allowance Mailed

This application has been accorded an Allowance Date and is being prepared for issuance. The application, however, is incomplete for the reasons below.

Applicant is given 30 days from the mail date of this Notice within which to correct the informalities indicated below. A failure to reply will result in the application being ABANDONED. This period for reply is NOT extendable under 37 CFR 1.136 (a) or (b).

Page 12 is missing.

APPLICANT MUST SUPPLY MISSING INFORMATION WITHIN 30 DAYS OF THE MAIL DATE OF THIS NOTICE.

A copy of this notice MUST be returned with the reply. Please address response to "Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313"

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Atty D ket N .: SON-2352

Application No.: 10/060,226
Titl : MEMORY DEVICE

Filing Date: February 1, 2002

D cum nts Filed:
Response to Notice to File Corrected Application Papers

Via:
Sender's Initials: RPK/sjm

Date: June 2, 2003

Inventor: Tomofumi Arakawa

Atty Docket No.: SON-2352

Application No.: 10/060,226
Title: MEMORY DEVICE

Filing Date: February 1, 2002

Documents Filed:
Response to Notice to File Corrected Application Papers

Via:
S nder's Initials: RPK/sjm

Dat : June 2, 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Tomofumi Arakawa

Application No.: 10/060,226 Group Art Unit: 2818

Filed: February 1, 2002 Examiner: Huan Hoang

For MEMORY DEVICE

RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS - NOTICE OF ALLOWANCE MAILED

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Notice to File Corrected Application Papers mailed May 2, 2003 (copy of which is returned herewith), applicants hereby submit a copy of page 12 of the specification for the above-identified application.

It may be noted that the alleged missing page 12 was forwarded by facsimile on April 11, 2003.

Should there be any questions regarding the application, the Examiner is invited to telephone the undersigned at telephone number listed below.

No fees are believed to be required. However, the Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 18-0013. A duplicate copy of this letter is enclosed for that purpose.

Respectfully submitted,

DATE: June 2, 2003

Ronald P. Kananen
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controls the memory device shown in FIG. 3. Address represents row and column address signals from the microcomputer. WL0 and WL1 represent the respective high and low voltages of the word lines WL0 and WL1, respectively. SA0-0, SA0-1, ..., and SA0-n represent the respective voltages of the sense amplifiers 30A-0, 30A-1, ..., and 30A-n on the pairs of bit lines BL0 and BLB0, BL1 and BLB1, ..., and BLn and BLBn, respectively. SA1-0, SA1-1, ..., and SA1-n represent the respective voltages of the sense amplifiers 30B-0, 30B-1, ..., and 30B-n on the pairs of bit lines BL0 and BLB0, BL1 and BLB1, ..., and BLn and BLBn, respectively.

Data Out represents output data outputted to the read data bus through the read gates. Data In represents input data supplied from the write data bus to the write gates. TGSel represents a gate select signal indicative of either the transfer gate 20A or 20B, from the microcomputer. TG0 and TG1 represent the control signals supplied to the transfer gates 20A and 20B, respectively.

The command Command first indicates ACT to a row address RA0 so as to activate the row address RA0, thus the word line WL0 first changes from low level to high level, and thus the command Command changes to Read so as to read column addresses CA00 and CA01. After that, the gate select signal TGSel changes to TG0 so as to change the gate signal TG0 from low level to high level, and thus the transfer gate 20A is turned on so as to allow the sense amplifiers 30A-0 and 30A-1 to amplify and latch "1" data of the memory cells 10-0 and 10-1, respectively. Then, the sense amplifiers 30A-0 and 30A-1 output the amplified data